HFS4 AC SOLID RELAY



Features

- No noise
- High electrical resistance
- Built-in RC protection circuit
- TTL circuit driver compatibility
- Output zero-crossing and random trigger are optional
- Rated load capacity: 2A/250VAC
- Dielectric strength: 3000VAC

RoHS compliant

Performance parameters

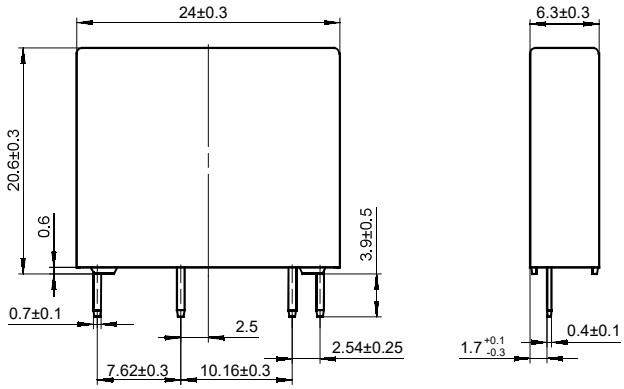
Input			
Rated input voltage	5D	12D	24D
Rated control voltage	5VDC	12VDC	24VDC
Ensure on voltage	4VDC	9.6VDC	19.2VDC
Ensure off voltage	1.2VDC	1.2VDC	2.4VDC
Maximum reverse polarity Voltage	3V		
Input current	50mA max.(Current-triggered type)		
	20mA max.(@ Rated Voltage)		
Single channel power consumption	0.3W max.		
Wiring polarity requirements	Polarized		
Output			
Operational method	Random switching/Zero-crossing switching		
Switching type	1NO		
Load voltage range	250VAC		
Rated Load Voltage	24VAC to 280VAC		
Rated load current	2A @25ºC		
	0.5A @80ºC		
Minimum off-state dv/dt	200V/μs		
Min. load current	20mA		
Non-repetitive surge current(10ms)	30A		
Max. I^2T(10ms,A^2s)	4.5		
Operate time	Random type: ⩽1 ms		
	Zero-crossing type: ⩽1/2 cycle + 1 ms		
Release time	⩽1/2cycle+1ms		
Maxmum on-state voltage drop	⩽1.5Vrms		
Maxmum off-state leakage current	⩽1.5mA(@220VAC)		
Protection circuit	RC circuit		
Operating frequency range	45Hz to 65Hz		
Load category	LC A		

Other parameters	
Operating temperature	-30˚C to 80˚C
Storage temperature	-30˚C to 100˚C
Moisture	35% to 85%RH
Weight	Approximately 5g
Pollution degree	2
Vibration	10Hz to 60Hz,1.5mm DA
	60Hz to 150Hz,19.6m/s²
Shock	980m/s²
Dielectric withstand voltage	Between input and output channels：3000VAC min.
Insulation resistance	Between input and output：1000MΩ min.(@500VDC)
Rated impulse withstand voltage(1.2/50us)	4kV min.
Standards Compliance	IEC62314，GB/ T 14536.1，GB/T 36640-2018，UL508
Product installation and maintenance	
Installation	PCB mounting

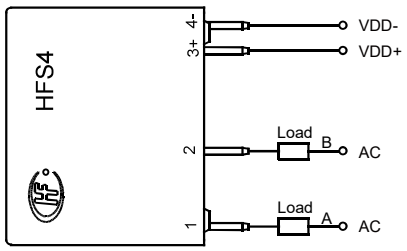
Outline Dimension Drawing,Circuit diagram

Unit：mm

Outline Dimension Drawing



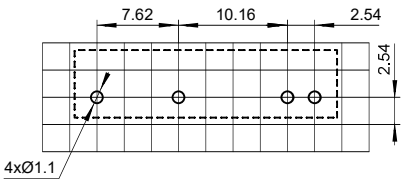
Circuit diagram



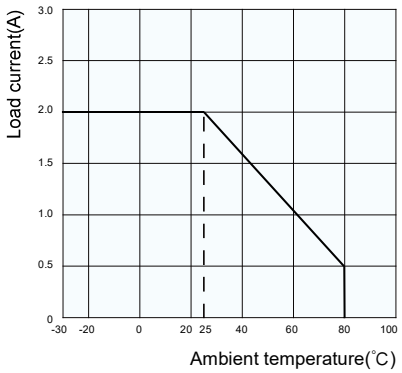
Load can be wired in position A or B

PC Board Layout

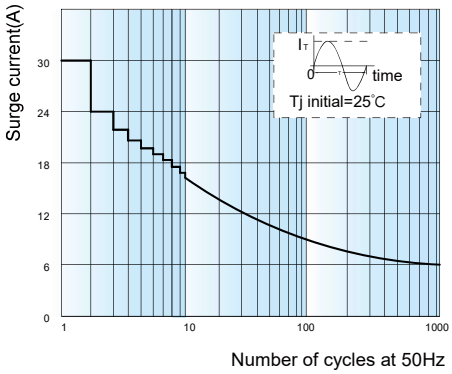
(Bottom view)



Performance graphs



Surge peak onstate current versus number of cycles



Ordering information

	HFS4 /	12D	-1M	(XXX)
Type				
Rated input voltage	**5D:**4~6VDC **12D:**9.6~14.4VDC **24D:**19.2~28.8VDC **0D:** 4~50mA DC(Current-triggered type)			
Trigger mode	**0M:**Zero-crossing triggering		**1M:**Triggered randomly	
Special code(1)	**Nil:** Standard	**XXX:** Customer special requirement		

Notes: (1) If the customer has special requirements, after evaluation by our company, identification will be provided in the form of a characteristic number.

Disclaimer:
The specification is for reference only. See "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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